

310 CMR 73.00: AMALGAM WASTEWATER AND RECYCLING REGULATIONS FOR DENTAL FACILITIES (NEW SECTION)

3/7/2006

Section 73.01: Purpose and Authority

- (1) The purpose of 310 CMR 73.00 is to protect public health, safety, welfare and the environment. These regulations establish wastewater treatment, operational standards, and amalgam recycling requirements to reduce the amount of mercury discharged from dental facilities, and require a performance-based compliance certification from the owners of dental practices in compliance with 310 CMR 70.00.
- (2) 310 CMR 73.00 is promulgated pursuant to the authority of M.G.L. c. 21, §§ 26 through 53 (the Massachusetts Clean Waters Act), M.G.L. c. 21C, §§ 4 and 6 (the Hazardous Waste Management Act), c. 111, § 150A (the Solid Waste Management Act) and M.G.L. c. 21A, §§ 2 and 8.

73.02: Definitions

Amalgam means an alloy containing mercury and other metals used to restore the dentition.

Amalgam Separator means an item of dental equipment designed to remove amalgam particles from the wastewater passing through the vacuum system, or any vacuum line filters and screens and/or chair-side traps of a dental facility prior to its discharge.

Amalgam Waste means any waste containing mercury amalgam or otherwise associated with preparation or use of amalgam, including but not limited to amalgam collected by chair-side traps, screens, filters, vacuum system filters, amalgam separators or other devices; waste elemental mercury; and waste amalgam capsules.

Approved Amalgam Separator means an amalgam separator that has been demonstrated by the manufacturer to achieve a 98% or greater amalgam ~~particulate~~ removal efficiency. Such removal efficiency shall be determined on the basis of test data generated by ~~the manufacturer a professional laboratory that is qualified to perform the following analytical methods:~~

- (a) ~~using~~ ISO protocol 11143, using average test results under empty and simulated full conditions; or
- (b) an equivalent method that meets ~~DEP-Department~~ approved quality assurance and quality control criteria.

Separators installed under the Department's voluntary Dental Amalgam/Mercury Recycling Certification program, described at 310 CMR 73.03(2)(a)-(b), that have been demonstrated to achieve 95% or greater removal efficiency may be used as long as the separator is properly maintained and continues to achieve a 95% or greater removal efficiency. However, any replacement for such amalgam separators must achieve a 98% or greater amalgam removal efficiency.

Dental facility means any institution, clinic, office or location where dentistry is practiced, as defined in M.G.L. c. 112, § 50.

Department means the Massachusetts Department of Environmental Protection.

ISO means the International Organization for Standardization.

Operational standards means specified business, operational, maintenance and other procedures listed at 310 CMR 73.05 that limit the amount of mercury released to the environment through wastewater and solid waste.

Owner of a dental facility means any person who owns, leases, maintains, or operates a dental facility in any office or other room or rooms where dentistry is practiced, as defined in M.G.L. c. 112, § 50, or who directly or indirectly is manager, proprietor, or conductor of the same.

Reclaimed means processing to recover a usable product or regeneration, but does not include burning (e.g. for energy recovery) or use constituting disposal.

73.03: Applicability

- (1) 310 CMR 73.00 is applicable to all dental facilities except those that do not generate or discharge wastewater from amalgam-related processes (e.g., facilities limited to oral and maxillofacial surgery, or orthodontic, periodontic and/or oral medicine practices) or facilities that use mercury-free filling material; and do not place or remove amalgam ~~(e.g. certain pediatric practices)~~.
- (2) Dental facilities that are subject to 310 CMR 73.00 must comply in accordance with the following schedule:
 - (a) A dental facility certified by an owner of a dental facility under the Department's voluntary Dental Amalgam/Mercury Recycling Certification program that it installed an approved amalgam separator by February 28, 2005 and maintains compliance with all other requirements of that program is subject to 310 CMR 73.00 effective February 1, 2010.
 - (b) A dental facility certified by an owner of a dental facility under the Department's voluntary Dental Amalgam/Mercury Recycling Certification program that it installed an approved amalgam separator between March 1, 2005 - January 31, 2006 and maintains compliance with all other requirements of that program is subject to 310 CMR 73.00 effective February 1, 2007.
 - (c) Dental facilities in operation as of [the effective date of this section] and that did not participate in the Department's voluntary Dental Amalgam/Mercury Recycling Certification program shall comply with all requirements of 310 CMR 73.00 no later than 60 days after [this section's effective date].
 - (d) A new or expanded dental facility ~~(i.e., one commencing operations after [the effective date of this section])~~ shall install an approved amalgam separator before commencing operation and shall comply with all other requirements of 310 CMR 73.00 in accordance with 310 CMR 70.03(4).
 1. a new dental facility is a dental facility commencing operations after [the effective date of this regulation];
 2. an expanded dental facility is a dental facility whose maximum amalgam wastewater flow rate exceeds the capacity of the existing certified amalgam separator due to facility expansion.
- (3) Compliance with 310 CMR 73.00 does not release the owner of a dental facility from the need to comply with other applicable state, federal and local requirements.
- (4) Certification Form. Each compliance certification required pursuant to 310 CMR 70.03 shall be on a form prescribed by the Department and shall address compliance with the standards

established by 310 CMR 70.00 and 310 CMR 73.00. The certification form may also address compliance with other applicable standards promulgated by the Department.

73.04: Amalgam Separator Requirements

- (1) Each dental facility subject to ~~these regulations~~310 CMR 73.00 shall:
 - (a) install an approved amalgam separator(s) which meets the requirements of ~~this section~~310 CMR 73.04;
 - (b) ensure that all wastewater that contains amalgam waste from the dental facility, including but not limited to wastewater from chairs and cuspidors, passes through an approved amalgam separator before being discharged;
 - (c) ensure that the installed amalgam separator(s) is properly sized to accommodate maximum amalgam wastewater flow rates at the facility;
 - ~~(d) ensure that all amalgam waste is collected from the amalgam separator in accordance with the manufacturer's instructions;~~
 - ~~(e)~~(d) ensure that any amalgam separator is installed, operated and maintained according to the instructions of the manufacturer of the unit;
 - ~~(f)~~(e) for new or expanded dental facilities that open after the effective date of this regulation, ensure that the amalgam separator is installed prior to commencing operations; and
 - ~~(g)~~(f) provide to the Department upon request test data generated by the ~~manufacturer~~professional laboratory that documents the amalgam separator's removal efficiency.

73.05: Operational Standards

- (1) Each dental facility subject to these regulations shall:
 - (a) ensure that no amalgam waste is disposed of with solid waste or medical waste;
 - (b) safely store all amalgam waste generated at the dental facility in containers that are sealed and structurally sound;
 - (c) use only biodegradable disinfectants and cleaning agents that are non-corrosive (pH range between 6.5-~~8.5~~9.0) and non-oxidizing (no bleach) in the facility's vacuum lines and all other drains connected to its amalgam separator, ~~which The disinfectants and cleaning agents shall also have been demonstrated to be~~ compatible with the unit(s) in use, and ~~shall be used such cleaning agents~~ only in accordance with the unit manufacturer's instructions;
 - (d) transfer all amalgam waste to a permitted hazardous waste recycling facility, licensed hazardous waste facility, a facility that consolidates shipments of amalgam waste before being shipped off-site for reclamation, or, if shipped out of state, a facility that is authorized to reclaim mercury from amalgam waste.
 1. shipments of amalgam waste to facilities described in 310 CMR 73.05(1)(d) shall be transported by either a common carrier or a licensed hazardous waste transporter, and accompanied by information identifying the shipment as amalgam waste containing mercury.

- (e) retain documentation, such as a certificate of recycling, a hazardous waste manifest, bill of lading or contractual agreement, [documents showing](#) that the amalgam waste has been recycled by being reclaimed and the name and address of the facility at which the amalgam waste is ultimately recycled.

73.06: Recordkeeping.

- (1) Dental facilities shall keep records on-site that demonstrate compliance with manufacturers' recommended maintenance and servicing of installed amalgam separators, that the amalgam waste has been recycled pursuant to 310 CMR 73.05(1)(e), and the supporting information upon which the facility relied to file the certification required by 310 CMR 73.07.
- (2) Records referenced in 310 CMR 73.06(1) shall be retained for five years.

73.07: Compliance Certification Requirements for Dental Facilities

- (1) Certification Form. Within 60 days of a dental facility becoming subject to the requirements of this section, pursuant to the schedule described at 310 CMR 73.03(2), an owner of a dental facility shall submit to the Department a compliance certification. The certification shall address compliance with standards to which the dental facility is subject on a form prescribed by the Department that shall include at least the following information:
 - (a) The type of amalgam separator installed, including manufacturer and model;
 - (b) Date upon which the amalgam separator became operational, and for new or expanded facilities, the date the facility became operational;
 - (c) Identification of the requirements of 310 CMR 73.04 for amalgam separators and certification as to whether or not the system meets all such requirements;
 - (d) Certification of compliance with the operational standards of 310 CMR 73.05;
 - (e) Certification that documentation and records are being maintained as stipulated in CMR 73.06;
 - ~~(f) List of all dentists practicing at the certifying facility; and~~

~~(g)~~ Certification that at least one staff member is familiar with procedures to follow in order to ensure compliance with the amalgam separator requirements and operational standards described at 310 CMR 73.04-73.05, [and that all other staff that handle amalgam waste are informed of these procedures.](#)

- ~~(2) No later than five years from the date of the initial certification, Each owner of a dental facility subject to 310 CMR 73.07 must recertify five years after the initial certification and every five years thereafter, each owner of a dental facility subject to 310 CMR 73.07 must recertify electronically~~ that the dental practice continues to be in compliance with all requirements listed in 310 CMR 73.04 through 73.07. [All such recertifications shall be submitted by June 15th of the year in which the recertification is due.](#)

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 70.00: ENVIRONMENTAL RESULTS PROGRAM CERTIFICATION

- 70.01: Purpose and Authority
- 70.02: Definitions
- 70.03: Compliance Certification Requirements
- 70.04: Violations of 310 CMR 70.00

70.01: Purpose and Authority

(1) The purpose of 310 CMR 70.00 is to provide for the protection of public health, safety, welfare and the environment by requiring a facility-wide, performance-based compliance certification.

(2) 310 CMR 70.00 is promulgated pursuant to the authority of M.G.L. c. 21, §§ 26 through 53 (the Massachusetts Clean Waters Act), c. 21A, §§ 2, 13 and 16, c. 21C (the Hazardous Waste Management Act), ~~and~~ c. 111, §§ 142A through 142M (the Massachusetts Clean Air Act) [and c. 111 § 150A \(the Solid Waste Management Act\)](#).

70.02: Definitions

The definitions found in 310 CMR 70.02 serve only for the purposes of enforcing the compliance certification requirements contained in 310 CMR 70.00 and are not intended to displace the existing definitions of those terms in the underlying standards.

Department means the Massachusetts Department of Environmental Protection.

Environmental Results Program Facility or ERP Facility means one of the following:

- (a) a dry cleaner subject to 310 CMR 7.26(10) through (16);
- (b) a photoprocessor subject to 310 CMR 71.00;
- (c) a printer as defined in 310 CMR 7.26(22); ~~or~~
- (d) a boiler subject to 310 CMR 7.26(30) through (37); ~~or~~
- (e) [an engine or combustion turbine subject to 310 CMR 7.26\(40\) through \(44\); or](#)
- (f) [a dental facility subject to 310 CMR 73.00](#)

Operator means the person responsible for the over-all operation of an ERP facility.

Owner means any person who has legal or equitable ownership, alone or with others, of an ERP facility, including, but not limited to, any agent, executor, administrator, trustee, lessee, or guardian of the estate for the holder of legal title.

Person means any individual, partnership, corporation, syndicate, company, firm, association, authority, department, bureau, trust or group including, but not limited to, a city, town, county, the Commonwealth and its agencies, and the federal government.

Responsible Official is one of the following:

- (a) For a corporation: a president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function who has been duly authorized pursuant to a corporate vote, or a representative of the corporation who

has been duly authorized pursuant to a corporate vote provided the representative is responsible for the overall operation of the facility; or

(b) For a partnership or sole proprietorship: a general partner with the authority to bind the partnership or the proprietor, respectively; or

(c) For a municipality, state, federal, or other public agency including any legislatively-created authority, board, commission, district, *etc.*: either a principal executive officer or ranking elected official who is empowered to enter into contracts on behalf of the municipality or public agency.

Standards means those requirements listed in the certification form referred to in 310 CMR 70.03(4), including but not limited to 310 CMR 7.00, 310 CMR 30.00, 310 CMR 71.00, 310 CMR 72.00, [310 CMR 73.00](#), 314 CMR 3.00, 314 CMR 5.00, or 314 CMR 12.00, requirements contained in NESHAP's (40 CFR Part 61 Subparts, and Part 63) or NSPS's (40 CFR Part 60 Subparts) that have been delegated to Massachusetts, and the terms and conditions of any permits issued pursuant to any of those regulations.

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70.03: Compliance Certification Requirements

(1) Certification. Effective June 27, 2003 each owner and/or operator of an ERP facility or an industrial wastewater holding tank shall submit to the Department an initial certification pursuant to 310 CMR 70.03(2) establishing the owner and/or operator's status as an ongoing certifier and thereafter file an ~~an annual compliance~~ certification no later than the schedule set forth in 310 CMR 70.03(6), or as required pursuant to 310 CMR 70.03(4). A responsible official shall sign a certification statement which:

(a) declares applicable standards as listed in the certification form and states whether the ERP facility is in compliance with the applicable standards; and

(b) identifies the date, type, and reporting date of any violations that were required by applicable law and/or standards as listed in the certification form to be reported to the Department and that occurred within the ~~year~~ [certification period](#) prior to the date of the certification statement including, but not limited to, any notifications required pursuant to MGL c. 21E, § 7 and 310 CMR 40.0300 (releases and threats of release of oil and/or hazardous material), and any reporting of violations required pursuant to 310 CMR 7.02(6) (air pollution control equipment failures), 314 CMR 12.03(8) (emergency bypasses to sewer treatment works), 310 CMR 30.520 (hazardous waste contingency plans) and the terms and conditions of any existing permits issued by the Department.

(c) ~~an annual~~ compliance certification is required to be filed ~~annually after~~ [at the initial end of each certification period](#) unless a statement of non-applicability is submitted to the Department on a form approved by the Department;

(d) For transition purposes, effective June 27, 2003 all initial certifications or annual compliance certifications timely filed by September 15, 2002 or filed in the period of September 16, 2002 through September 15, 2003, shall establish the owner and/or operator's status as an ongoing certifier under 310 CMR 70.00;

(e) Notwithstanding 310 CMR 70.03(1)(a) through (d), photoprocessors holding a permit from the Massachusetts Water Resources Authority pursuant to 360 CMR 10.000 are deemed to hold the equivalent of an ERP certification and are not required to file a initial certification or annual compliance certification pursuant to 310 CMR 70.00 and 71.00, but such photoprocessors are required to pay an annual compliance fee to the Department pursuant to 310 CMR 4.00; and

(f) Photoprocessors located in the service area of the Massachusetts Water Resources Authority that haul or ship photoprocessing waste off-site are required to file a initial certification or annual compliance certification pursuant to 310 CMR 70.00 and 71.00.

(2) Certification Statement. Each responsible official providing information for an ERP facility is required, pursuant to 310 CMR 70.03(1), to make the following certification:

"I, [name of responsible official], attest under the pains and penalties of perjury:

(a) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification statement;

(b) that, based on my inquiry of those individuals responsible for obtaining the information, the information contained in this submittal is to the best of my knowledge, true, accurate, and complete;

(c) that systems to maintain compliance are in place at the facility and will be maintained for the ~~coming year~~ [duration of the certification period](#) even if processes or operating procedures are changed over the course of the ~~year~~ [certification period](#); and

(d) that I am fully authorized to make this attestation on behalf of this facility. I am aware that there are significant penalties, including, but not limited to possible fines and imprisonment, for submitting false, inaccurate, or incomplete information."

(3) One-time Certification Statement. Each responsible official providing information for an industrial wastewater holding tank is required, pursuant to 310 CMR 70.03(1), to make the following certification:

"I, [name of responsible official], attest under the pains and penalties of perjury:

- (a) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification statement;
- (b) that, based on my inquiry of those individuals responsible for obtaining the information, the information contained in this submittal is to the best of my knowledge, true, accurate, and complete;
- (c) that systems to maintain compliance are in place at the facility and will be maintained even if processes or operating procedures changed; and

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70.03: continued

(d) that I am fully authorized to make this attestation on behalf of this facility. I am aware that there are significant penalties, including, but not limited to possible fines and imprisonment, for submitting false, inaccurate, or incomplete information."

(4) New ERP Facilities or New Industrial Wastewater Holding Tanks, Recommencement of ERP Facility Operation, and Transfer of Ownership. Within 60 days of:

- (a) the commencement of operation of a new ERP facility or a new industrial wastewater holding tank;
- (b) the recommencement of operation of an ERP facility for which no certification was submitted during the year prior to recommencement; or
- (c) acquiring an ERP facility, each owner and/or operator of the ERP facility shall submit a compliance certification in accordance with 310 CMR 70.03(1) and (2).

(5) Certification Form. Each initial certification and each annual compliance certification required pursuant to 310 CMR 70.03 shall be on a form prescribed by the Department and shall address compliance with standards to which the ERP facility is subject. The certification form may include specialized forms for specific categories of ERP facilities or holding tanks, and any owner/operator required to submit a certification pursuant to 310 CMR 70.03 shall submit all forms applicable, including but not limited to forms which identify the requirements in violation, what the facility will do to return to compliance, and the date by which compliance will be achieved.

(6) Schedule for Submission of Certification Form.

(a) Owners and/or operators of the following types of ERP facilities shall submit certification forms to the Department by September 15th of each year:

- 1. dry cleaners subject to 310 CMR 7.26(10) through (16);
- 2. photo processors subject to 310 CMR 71.00;
- 3. printers subject to 310 CMR 7.26(20) through (29).

(b) Owners and/or operators of facilities with boilers subject to 310 CMR 7.26(30) shall submit certification forms in accordance with the schedule set forth in 310 CMR 7.26(32)(b).

(c) Owners and/or operators of industrial wastewater holding tanks shall submit to the Department one-time certification forms in accordance with the schedule and conditions set forth in 314 CMR 18.11.

[\(d\) Dental facilities subject to 310 CMR 73.00 shall submit certification forms in accordance with the schedule and conditions referenced in 310 CMR 73.07.](#)

70.04: Violations of 310 CMR 70.00

It shall be a violation of 310 CMR 70.00 for any person to:

- (1) fail to submit a certification pursuant to 310 CMR 70.03(1);

(2) make any false, inaccurate, incomplete, or misleading statements in any certification required pursuant to 310 CMR 70.03;

(3) make any false, inaccurate, incomplete or misleading statements in any record, report, plan, file, log, or register which that person is required to keep pursuant to the applicable standards;

(4) hold themselves out as a responsible official in violation of the requirements contained in 310 CMR 70.0(3)2;

(5) fail to comply with the applicable standards; or

(6) violate any other provision of 310 CMR 70.00.

The Department reserves the right to exercise the full extent of its legal authority, pursuant to M.G.L. c. 21 §§ 26 through 53 (Massachusetts Clean Waters Act), c. 21A §§ 2, [8](#), 13 and 16, c.21C (Hazardous Waste Management Act), ~~and~~ c. 111 §§ 142A through 142M (Massachusetts Clean Air Act), [and c. 111, § 150A \(the Solid Waste Management Act\)](#) in order to obtain full compliance with all requirements applicable to ERP facilities, including but not limited to, criminal prosecution, fines, civil and administrative penalties, and orders.

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

REGULATORY AUTHORITY

310 CMR 70.00: M.G.L. c. 21, §§ 26 through 53; c. 21A, §§ 2, 13 and 16; c. 21C ~~and~~
c. 111, §§ 142A through 142M, [and c. 111, § 150A](#).

(PAGES 2465 THROUGH 2484 ARE RESERVED FOR FUTURE USE.)

Amendments to 310 CMR 30.000

1. Revisions to 310 CMR 30.010

310 CMR 30.010 is amended by inserting the following three new definitions:

Amalgam means an alloy containing mercury and other metals used to restore the dentition.

Amalgam Waste means any waste containing mercury amalgam or otherwise associated with preparation or use of amalgam, including but not limited to amalgam collected by chair-side traps, screens, filters, vacuum system filters, amalgam separators or other devices; waste elemental mercury; and waste amalgam capsules.

Dental facility means any institution, clinic, office or location where dentistry is practiced, as defined in M.G.L. c. 112, § 50.

2. 310 CMR 30.104 is amended by inserting 310 CMR 30.104(2)(u)

30.104(2) Wastes Otherwise Excluded from 310 CMR 30.000:

(a)

(t) Wastes with infectious characteristics, which are regulated by the department of Public Health pursuant to M.G.L. c. 111, §§ 3 and 51 through 56.

(u) Amalgam waste that is hazardous solely because it fails the test for the Toxicity Characteristic of 310 CMR 30.125 for Hazardous Waste Code D009 when managed by dental facilities in compliance with the requirements of 310 CMR 73.00.

1. Massachusetts facilities that reclaim amalgam waste described in 310 CMR 30.104(2)(u) must comply with the requirements of 310 CMR 30.200 and 30.800, as applicable.

2. Massachusetts facilities that consolidate but do not reclaim shipments of amalgam waste described in 310 CMR 30.104(2)(u) must, prior to shipping off-site for reclamation:

a. accumulate amalgam waste in containers that are sealed and structurally sound; and

b. accumulate amalgam waste for no more than one year.

